Museums Empowered

Sample Application ME-249540-OMS-21
Project Category: Evaluation

Denver Museum of Nature and Science

Amount awarded by IMLS:	$137,930
Amount of cost share:	$141,550

The project description can be viewed in the IMLS Awarded Grants Search:
https://www.imls.gov/grants/awarded/me-249540-oms-21

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion

When preparing an application for the next deadline, be sure to follow the instructions in the current Notice of Funding Opportunity for the grant program and project category to which you are applying.

1. PROJECT JUSTIFICATION

A. Need, problem, or challenge addressed. Museums are well established as important informal learning spaces, however, museums offer holistic experiences that encompass much more than learning. Previous research in visitor studies shows that a museum experience is also valued because it offers fun or entertainment, a sense of escapism, aesthetically pleasing spaces, soothing spaces that can improve health and well-being, introspective moments of reflection, and opportunities for interaction with others as well as emotional response or connection. Museum researchers typically measure learning outcomes or broad satisfaction measures; the ability to address all of these dimensions of the visitor experience is needed to understand what makes visitors choose a museum, how that experience is remembered and shared, and how to create experiences to which visitors will want to return. For free-choice visitors, museums are just one option among many in the leisure activity landscape. The fields of tourism and research about humans and our relationship to spaces indicate that the decisions of how and where to spend free time and dollars are increasingly complex and personal as consumers live in a context of technology, big data, and more choices (Lentini & Decortis, 2010; Pine, 2005; Pine & Gilmore, 2005; Pine & Gilmore, 1998). Ultimately, our choice to partake in one activity over another is because the activity of choice is in some way meaningful to us.

Meaningfulness is a complex phenomenon to investigate because it is subjective and individual. However, being able to understand some of the common elements that create a meaningful experience could help museum professionals create and deliver programs, exhibits, and experiences that have meaning for a wider audience, whether onsite at museums or in museum experiences happening in the community. Conversations with peer cultural institutions confirm that these concerns are not unique to DMNS. Peer museums and zoos are searching for concrete ways to measure similarly complex concepts within a visitor experience, like "wonder" and "awe," as we are all catching up to the new realities of museums and how they must call to peoples' values and motivations. While personal relevance is an important dimension of the visitor experience, tools currently available to measure visitor satisfaction (with indicators such as if a visitor would come again or recommend the experience to others) fall short. Given how dynamic a visitor experience can be, a multidimensional approach to evaluating the experience that taps into personal meaningfulness would be incredibly powerful.

For many years, DMNS has engaged in community-based audience research that further underscores the importance of personal meaning (Appendix 1.a. – 1.d.). This research provided both a comprehensive scan of community interests and values with respect to the role they would like DMNS to play in their lives, and feedback on specific projects within the strategic plan, such as the Museum on Wheels and *Space Odyssey* exhibition. A common theme for all – including both current audiences and diverse community members who don't currently visit the Museum – was a desire for personalized experiences that enable them to explore, be physically active, and be the decider of the outcome (see Community Values, Appendix 1.e., for more).

We also know that enjoyment of museums is not equally shared among the diverse demographic groups that make up our communities. Historically, museum visitors have largely been White, well-educated, from higher socioeconomic brackets, and female (Blume-Kohout, et al., 2015; Borwick, 2012). These trends are seen among DMNS' onsite free choice visitors; 75% identify as White, 70% hold a college or post-graduate degree, 69% have household income greater than $65,000, and 65% are female. An ongoing challenge for museum professionals is how to attract and create relevant experiences for visitors with diverse cultural backgrounds and perspectives. Once museums have a validated way to dissect differences across motivators and indicators of meaningfulness among current audiences, we have a critical foundation from which to pursue the ongoing meta issue of how to increase relevance to diverse audiences who are, in many cases, not yet visitors of museums.

B. Studies and best practices informing the project. The project builds on research in visitor studies that offer potential dimensions of meaningfulness for visitors. Pine and Gilmore offer a conceptual framework outlining four dimensions of an experience: entertainment, education, aesthetic, and escapism (1999). Research on human interactions in spaces offers two affective dimensions – relational and personal – that, when added to the Pine and Gilmore framework, get us closer to addressing meaningfulness (Lentini & Decortis, 2010). The relational dimension encompasses the interpersonal relationships and interactions that happen in a space, and the personal relates to an individual's experience with reflection, introspection, and personal growth. Finally,

research on the emotional dimension of an experience will inform the project (Forlizzi & Battarbee, 2004; Forlizzi et al. 2003; Pullman & Gross, 2004). Because museums are places of both fun and learning, where groups visit together and share in the experience, and where individuals come to reflect, combining these frameworks provides a new, yet evidence-based framework with seven dimensions – education, entertainment, escapism, aesthetic, personal, relational, and emotional. There is a gap in available tools to measure all of these dimensions at once that this project seeks to address. This theoretical framework for meaningfulness guides the research process we will undertake in order to design and validate a new evaluation tool.

C. Benefits. The organization will benefit from a validated survey tool critical to evaluating a core metric of our strategic plan. Among staff, the evaluation department (Community Research and Engagement Strategies, or CRES) members will benefit from deeper knowledge in methodology. DMNS staff responsible for acquiring and creating exhibitions and developing programs will gain understanding of how to apply this type of evaluation finding to their work. Other staff, senior leadership, and board members will benefit from increased understanding of evaluation and its importance to Museum operations through more general trainings. Diverse current and future museum guests will benefit from more personalized and memorable experiences enabled by our deeper understanding of why something is meaningful. The museum field will benefit from the dissemination of the tool as they apply it in their own museums. Smaller museums and those with limited evaluation staff often lack capacity to collect data and develop their own survey tools so they, in particular, have shared with us that they would welcome such a tool (see letters in appendices 2 and 3).

D. Advancement of the institution's strategic plan. The creation and application of this evaluation tool is an integral part of the Museum's $60 to $70 million strategic plan, the primary objective of which is to connect more and diverse people with nature and science in ways that are meaningful to them. The seven projects within this bold plan will create all-new experiences, informed by community input, both in our building and out in the community. The plan outlines three primary metrics: 1) We connect with more people, and our audience is more diverse (specifically, race/ethnicity and socioeconomic status of our audiences is more reflective of our region); 2) Visitors report that their interactions with DMNS are meaningful; and 3) Our business is thriving. We will measure Metric 1 through attendance and demographic data, and Metric 3 through data related to employee satisfaction, financial strength, and scientific credibility. This project will yield a robust and validated means to measure Metric 2. This is a critical gap in understanding the progress of the strategic plan and return on the significant investment it represents. As our community grows more diverse, and the competition for people's free time and money increases and evolves, we must advance our understanding of what makes experiences meaningful and adapt accordingly.

E. Addressing the goals of IMLS Museums Empowered. The project will provide professional development activities that cross-cut various departments. Several members of the CRES team are emerging museum professionals, thus the investment in their growth is an investment in the next generation of diverse museum leaders. It will strengthen our ability to serve the public by informing us about what is most impactful and meaningful, ensuring we can continue to iterate and improve, and increase the Museum's relevance to more and diverse people. Over time, the capacity enabled by this project can lead to systemic change within the Museum, armed with diffuse evaluation knowledge and the tools to measure our most important metrics.

F. Alignment with Evaluation project category. This project will augment an institution-wide evaluation framework and improve our ability to demonstrate impact to our stakeholders. It will build staff capacity to utilize a newly validated tool and add to their knowledge of concepts related to research methodology. The training program targets multiple levels of evaluation data users. Those who develop programs, exhibits, and experiences will receive training on how to use evaluation reports, data, and metrics in order to improve these products. Other staff, senior leadership, and trustees will receive a lighter dose of training. The project will result in greater understanding across the Museum of how it is possible to measure concepts like meaning in a scientifically valid way, and how DMNS in particular approaches this challenge within its strategic initiatives.

2. PROJECT WORK PLAN

A. Activities. Two strands of evaluation capacity building activity comprise the project: research in the service of developing a validated evaluation tool, and staff professional development.

STRAND I: Develop a validated evaluation tool: Objectives of the research are to identify the experiential elements and constructs that make up meaningfulness in a museum experience, determine the indicators that make up those experiential elements, and finally, identify any demographic factors that influence meaningfulness for visitors. The contract methodologist, Courtney Donovan, advised on the research plan and will lead its implementation, supported by two graduate research assistants from University of Colorado. The proposed timeline for these activities is informed by historical trends; DMNS past surveys tend to have a high response rate and surveys can often be completed with sufficient sample size in only a few weeks.

Year 1: Development of Construct and Tool

A survey tool will be developed through an iterative research process:

Phase 1: Construct definition: Constructs are the subjective elements that help us to better understand a phenomenon we want to explore. Most phenomena are made up of many elements that can be specific to an individual or general across populations. The researchers will explore the constructs of meaning from the literature through visitor focus groups around multiple DMNS galleries (four focus groups of 12 participants each). Focus groups will include both English and Spanish options and will be led by CRES staff. Transcripts will be analyzed by the research team and will generate general information about what elements are important during a visit. For example, visitor responses might point to interactive elements, good for kids, pop culture, or history as the important elements that make up their experiences.

Phase 2: Interviews on meaningfulness and coding: On-the-spot interviews with individuals or groups (target sample size of 50) will capture more specific participant thoughts about what makes the important elements of a visit meaningful. Interviews will be recorded and transcribed. The lead researchers will norm the data using grounded theory coding for experiences and ways people describe meaningfulness. In grounded theory methodology a researcher does not predict an outcome, but rather collects data and then makes a new theory based on what the data shows. The PD and Co-PD will also train the other CRES staff members to code the data. From this data collection and analysis will emerge a set of elements that are most common across participants, and we will begin to understand what makes a museum experience meaningful. We will share the codes and findings with community members to truth check the data before advancing to the next phase.

Phase 3: Piloting: We will create an initial survey tool informed by the perspectives and expertise of a diverse group of museum visitors, evaluation experts, and museum staff. We will then pilot the tool in two phases with a sample size of 50-100 visitors each, first focusing on a single exhibition and then an exhibition that is conceptually very different (e.g. fossils vs health science). Following the first pilot, the research team will conduct statistical tests (item analysis, reliability, and exploratory factor analysis (EFA)) and examine any similarities or differences in the constructs and survey items across different visitor groups to determine which survey items were most effective in measuring the constructs of meaningfulness. The research team will adapt the survey based on the analysis and re-test the tool with the second pilot.

Year 2: Field Administration (across DMNS and other museums)

Phase 4A: Field Administration 1: Following the pilot tests we will have an established survey tool that we can use with an even broader sample of visitors. The team will test the tool across six major exhibitions at DMNS (*Gems and Minerals, Space Odyssey, Expedition Health, Prehistoric Journey, Ancient Egypt* and/or the *Crane Hall* Native American gallery, and rotating temporary exhibitions). This sample will be large (10 * number of final items * 6 major exhibits), allowing for multiple statistical tests to be run on the data to further examine the effectiveness of each survey item in measuring meaningfulness and the reliability of the survey as a whole, and to explore any differences between groups of visitors or types of experiences. Depending on findings, further item modifications will happen and may need another sample to verify.

Phase 4B: Field Administration 2: Once a survey tool has been established that works well for one museum, the PD or Co-PD and a research assistant will travel to five peer museums for a final administration (sample size of 50-100 each) across multiple exhibitions (Appendix 2 statements of commitment from the Natural History Museum of LA County, Exploratorium, Science Museum of Minnesota, Museum of Science and Industry

(Chicago), and Museum of Science in Boston). These museum partners have expressed an interest in hosting our researchers and having access to the results. Statistical analysis will again take place to ensure consistency.

Year 3: Tool Launch, Writing, and Dissemination

A final survey tool established in Year 3 will be used across the Museum to evaluate the projects within the strategic plan, and will be incorporated into the institution-wide evaluation framework for all of its experiences and programs. The survey tool will also be ready for adoption by other museums and researchers.

The PD, Co-PD, and Contractor will collaboratively submit proposals to several national conferences, including Visitor Studies Association, American Alliance of Museums, American Evaluators Association, and American Educational Research Association. We hope to have presentations accepted at two of these conferences. We will submit two articles to journals and platforms; one that is museum focused (*Exhibition* and *Curator*), and one journal/platform whose audience is researchers (*Educational and Psychological Measurement* and *Journal of Educational Measurement*). We anticipate interest from both of these audiences in adapting and using the tool. Depending on timing of conferences, it is possible that presentations may occur after the grant period ends.

The PD and Co-PD will also plan presentations and present findings at local meetings of fellow cultural institutions and local evaluation networks. For instance, the Denver Evaluation Network (DEN), comprised of over 20 museums of all sizes, is a group led by DMNS and established through a previous IMLS award (MP-00-12-0062-12) that regularly meets and collaborates. Denver's five major cultural organizations have an established network among their evaluation staff. They meet regularly to share results of projects and support each other in implementing best practices. We will also propose to present at a scheduled gathering of the Colorado Evaluation Network (COEN). See the attached letters of support (Appendix 3) from some of these partners indicating their interest in the results of this project. Finally, the team will offer a free webinar open to the public in order to disseminate results to a broader community audience.

STRAND II: Staff Professional Development: The objectives of these activities are to augment evaluation knowledge for evaluation staff, increase evaluation knowledge among staff and trustees at all levels of decision-making and appropriate to their level of involvement with evaluation in their daily work, and create institution-wide buy-in for the new evaluation tool.

In years 1 and 2 the four members of the CRES team (Giron Mathern, Kleinheksel Roth, Hernandez-Bravo, and TBH Research Analyst) will receive in-depth methodological training from Courtney Donovan assisted by graduate research assistants corresponding with each phase of the research.

Year 1: CRES Team Evaluation Workshops

- Measure creation workshop will educate the team on the difference between surveys and scales with an introduction to psychometrics (corresponds with Phase 1 construct definition).
- Qualitative analysis workshop will provide education on qualitative coding techniques and qualitative analysis using emergent/grounded theory coding (corresponds with Phase 2 interviews on meaningfulness).
- Survey analysis workshop will explore item analysis, reliability, and EFA analysis in depth (corresponds with Phase 3 piloting).

Year 2: CRES Team Evaluation Workshops

- Confirmatory factor analysis (CFA) half-day workshop focused on what CFA does and how this is applied using SPSS Amos software (corresponds with Phase 4 field testing).
- Item Response Theory workshop will compare classical test theory used in EFA and CFA to the theory behind the Rasch model (corresponds with Phase 4).
- Rasch Modeling full day or multi-day workshop will focus on applying the Rasch model using Winsteps software (corresponds with Phase 4).

Prompts from Dr. Donovan will encourage participants to reflect on what they have learned, offer practice for applying the new techniques, and be an opportunity to gather feedback on the workshop delivery and content.

Year 3: All Museum Staff and Leadership Evaluation Workshops

In Year 3, the PD and Co-PD will develop and implement evaluation trainings appropriate for three categories of museum staff and stakeholders. Both are experienced presenters and trainers, and training development and delivery schedule will be based on their past experience in creating trainings for new methodologies.

1. A two- or three-day workshop for 8-10 staff who play roles in acquiring or enhancing temporary exhibitions, developing and updating permanent exhibitions, and developing and implementing programs and other experiences. This workshop will also be adapted to a webinar format that will be offered to staff at all of the museums that hosted us during the field administration phase. If desired, this level of training can be repeated to reach a larger number of directors, managers, and program staff.
2. A Lunch and Learn series open to all staff. Possible topics include: an overview of the tool creation process and how it supports the strategic objective of the Museum; application of the tool; and how to utilize findings for project, program, or exhibit planning. The CRES team has conducted similar general trainings for staff on topics such as logic models and the co-creation spectrum. Based on past interest and participation, we anticipate reaching 65-70 staff members through this training.
3. A one-hour presentation to the five members of the DMNS Senior Leadership Team and 30 members of the Museum's Board of Trustees during a scheduled board meeting. The Trustees have played a role in setting the direction of the strategic plan and its outcomes so information on the Museum's approach to measuring outcomes is of interest to them. Content will be similar to what is shared in the Lunch and Learn series.

The CRES team will follow up each training session with emailed surveys to evaluate learning gains.

B. Risks. While the long-term goal is to create a tool that is equally valid for currently underrepresented audiences, we acknowledge that this study will by virtue of its design be validated by audiences already coming to DMNS or the other museums where we field test the tool. Demographic diversity in terms of age, race/ethnicity, income level, and education level will be limited to current visitation. Additional research will be needed to help us fully understand demographic factors that influence meaning. Field testing at other museums helps us to some extent correct for biases or lack of representation that might be inherent among the DMNS audience. For instance, the Natural History Museum of LA County's audience is over 40% Latinx, a demographic group we know is underrepresented at DMNS.

The proposed research will develop a new tool using a methodology free of pre-determined expectations or hypotheses; therefore, it is possible that this work will not yield the type of tool we envision. We are confident, however, that the research will yield greater understanding that will benefit the field, and a foundation to continue this line of inquiry.

We are moving forward with the assumption that in the wake of the COVID-19 pandemic our organization will once again allow business travel, in-person interviews and surveys can be administered, and attendance levels at our museum and the other museum sites have recovered to allow for adequate sample sizes in the time allotted. There is a risk that behaviors toward social distancing will continue for years to come and museum attendance will remain lower than normal. If this comes to pass, we will move to digital survey and interview techniques, extend the time periods for collecting data, and would consider training staff at the participating museums to administer the surveys themselves.

Finally, staff turnover is always a risk to the efficacy of professional development to increase institutional capacity. To mitigate this risk, we will build in a contingency plan to bring any new staff members up to speed by ensuring they are caught up on training by the graduate research assistants.

C. Who will plan, implement, and manage the project.

DMNS personnel: The project will be led by the Project Director, Andréa Giron Mathern, and the Co-Project Director, Ellen Roth. Giron Mathern is uniquely qualified to lead this project. She is completing her PhD in Research and Evaluation Methods, and brings a strong background in the literature upon which this project builds. She also leads the Museum's Living Our Values team, playing a major role in the Museum's work to

apply the lens of diversity, equity, and inclusion to its organizational practices and policies. She is a lead member of several strategic plan initiative teams. Roth holds an MA in Museology with an emphasis on museum evaluation. Her typical responsibilities include managing the full evaluation cycle for a variety of internal facing evaluation projects and training research assistants on data collection.

The other two evaluators on the CRES team (Hernandez-Bravo and a Research Analyst) will be trained and assist the research team with data analysis, participate in professional development, and help with planning and implementing trainings to other Museum staff. DMNS employs a pool of 25-30 part-time research assistants who are trained by Kleinheksel Roth and tasked with implementing the Museum's on-the-floor visitor experience surveys. This pool of research assistants will assist with survey data collection for this project. The department's business support specialist (Aponte-Silva) will assist with project logistics, including travel and scheduling, and she will lead time and financial tracking for the team.

Contract personnel: Courtney Donovan, PhD, University of Colorado Boulder, brings to the project a depth of expertise in methodology. Her areas of expertise include psychometrics and measurement, and mixing quantitative and qualitative methods. Her background includes teaching middle schoolers through graduate students, and she is adept at making intimidating subjects accessible to all students. Two graduate students under Dr. Donovan's supervision will conduct all analyses, train CRES staff, and participate in writing and dissemination.

Roles and time commitments of all personnel are further described in the Budget Justification.

D. Equitable and mutually beneficial team structure. The team members working on the research strand also benefit equitably from the professional development strand. The other extended team members are the museums at which we will conduct data collection site visits in Year 2. The project will pay each museum an honorarium, and provide access to the raw data collected at their site, as well as the final versions of the tool and the report. Several of the participating museums do not have data collection teams and see the data collection element of this project as a benefit since they would not have the internal resources to collect such information.

E. Sequence of activities. In Year 1, we will develop the initial constructs and pilot a measurement tool, resulting in a product that is ready to test at a larger scale. The focus in Year 2 is on scaling as we test the tool both at DMNS and across five other museums, building our understanding of how the tool could be adapted to other sites as we validate it. During years 1 and 2 the contractor will provide professional development in advanced evaluation concepts to the CRES team corresponding with the research phases. The dissemination activities in Year 3 will further scale the project, as we anticipate continued learning and refinement even while the tool may be adopted by a broader audience of museums, evaluators, and researchers. Professional development activities for various groups of museum staff is planned to take place concurrently with these dissemination activities. See section 2.A above and the attached Schedule of Completion.

F. Resources. The project cost of $279,480 includes $137,930 requested from IMLS and $$141,550 of non-federal cost share. The Museum's in-kind contribution is comprised of all DMNS personnel listed as the project team (salary and fringe), Survey Gizmo software costs, and indirect costs. IMLS funds would support a contract with Courtney Donovan for both research and professional development activities, which includes funding for two part-time graduate research assistants, and their travel to a national conference for dissemination with the DMNS team in Year 3. IMLS funds would also support travel for two DMNS staff members to five other museums in the field testing phase in Year 2 and two conferences in Year 3. Grant funds would also support incentives for focus group participants, honoraria for partner museums, iPads for data collection, software licenses for data analysis (SPSS, Amos, Winsteps, and Dedoose) and transcription (Rev), conference registration fees, and indirect costs.

G. Tracking progress. The PD, Co-PD, and Contractor will maintain regular communication throughout the project. They will convene in person or via Zoom, at minimum, at the conclusion of each phase throughout the project to check in on progress toward our intended results, and will discuss in advance if any deviations are needed to the proposed timeline or activities. The PD will occasionally report on progress to the Museum's Senior Leadership Team because this work is central to understanding the success of the strategic plan. The

business support specialist will monitor expenses in real time, and the quarterly billing cycle managed by the Finance department provides another opportunity to compare budget to actuals.

H. Sharing of project results. Dissemination related to the validated evaluation tool is a primary activity in Year 3 and is described in the Activities section above, with the end goal of the tool being available for any museum or cultural institution to use. The tool will be freely available on the DMNS website, and all dissemination activities – presentations, articles, etc. – will direct interested parties to its location on the website. The learnings from the professional development strand of this project will also be of interest to the same local evaluation networks including the Denver Evaluation Network and the Colorado Evaluation Network. Findings will be shared with these groups during network meetings.

PROJECT RESULTS

A. Intended results. The project will result in a validated means by which to measure the success of our strategic plan. Long-term, by increasing the Museum's ability to utilize evaluation data to inform the creation of programs, exhibits, and other experiences, we will create more meaningful experiences for our audiences and a foundation for successfully reaching more diverse audiences. Beyond the results for DMNS, we will have validated an approach for measuring a central, yet nebulous and previously not well understood, component of the visitor experience, that will likely result in adoption of the tool by other museums and researchers.

B. Changes in knowledge, skills, behaviors, and/or attitudes. The four groups receiving professional development will increase their knowledge of evaluation. Members of the CRES team will increase their knowledge of advanced methodology concepts, augmenting identified gaps in knowledge of the already strong evaluation capacity of the institution to carry out and sustain a robust institution-wide evaluation framework. The CRES team informs the evaluation plans for all Museum programs so they can ensure that the tool is being used across the Museum on an ongoing basis. Staff who develop programs and exhibits (including those at the collaborating museums) will gain practical knowledge about how to utilize evaluation data to improve their products. By investing in professional development of these staff members, we strengthen the link between evaluation and effective program, exhibit, and experience development and better serve our audiences. Other museum staff, leadership, and trustees will gain foundational understanding of evaluation methods and principles. This broader evaluation literacy will foster an organizational culture in which all staff appreciate the value of evaluation data, and a greater propensity to incorporate sound evaluation practices into all of its projects and activities.

E. Measurement of project's success. Survey instruments tailored to each professional development audience and training content and format will be developed as part of the overall evaluation plan. These tools will measure the extent to which the training participants increase their understanding, interest, and confidence that they can apply their learnings as a result of the training. These tools will be crafted by the CRES team and will provide data on the effectiveness of trainings as well as illuminate opportunities for improvement. Because the CRES team will receive more in-depth training, they will also write reflections, and be provided with opportunities to apply their knowledge to real-world scenarios. The evaluation tools for the CRES team's learning gains will be developed by Dr. Donovan. Extending beyond the term of this grant, we will also track the number of publications and presentations accepted, and the number of museums and/or researchers that indicate interest in adopting the tool.

F. Tangible products. Tangible products include the survey tool itself, the wealth of data generated, a professional development framework suitable to staff with varying levels of interaction with evaluation, and the various publications and presentations that will be produced.

G. How benefit of the project will be sustained. The evaluation tool will continue to benefit the Museum for many years because it will be integrated into the institution-wide evaluation strategy led by the CRES team, not only for the projects within the current strategic plan, but for all of our products. Training staff is an initial investment that sustains itself as there is no need to pay for ongoing consultations, and because we intend to use learnings to inform systems that remain in place even after individual staff members move on.

SCHEDULE OF COMPLETION

PROJECT YEAR	Year 1				Year 2				Year 3			
CALENDAR YEAR	2021	2022				2023				2024		
QUARTER	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
STRAND I: Develop a validated evaluation tool												
Project kick-off and orientation (PD, Co-PD, Contractor)												
Phase 1: Focus groups and analysis to capture starting indicators of constructs. (PD, Co-PD, Contractor)												
Phase 2: Interviews on meaningfulness, followed by grounded theory coding to further hone the assessment tool, and member-checking the data (PD, Co-PD, CRES, Contractor, RAs)												
Phase 3: Creation and two rounds of piloting of the item pool in the assessment tool (PD, Co-PD, Contractor, RAs)												
Phase 4A: Field test tool through iterative rounds of on-the-floor surveys throughout DMNS exhibits and galleries followed by anaysis (PD, Co-PD, RAs, Contractor)												
Phase 4b: Field test tool across five out of state museums- followed by analysis (PD, Co-PD, RAs, Contractor)												
Data analysis and writing (PD, Co-PD, Contractor)												
PD and Co-PD propose presentations to national conferences												
PD and Co-PD plan and present findings at local meetings of fellow cultural institutions and evaluation networks												
PD and Co-PD plan and present a free webinar for dissemination to public audiences												
STRAND II: Staff Professional Development												
Contractor trains CRES team on in-depth methodology topics (6 workshops over years 1 and 2) (Contractor, PD, Co-PD, CRES)												
PD and Co-PD plan and provide 2-3 day workshop for 8-10 other staff whose roles offer opportunities to apply the tool (i.e. exhibits and program development)												
PD and Co-PD plan and provide a training webinar to staff at partner museums												
PD and Co-PD plan and provide lunch and learn sessions open to all museum staff												
PD and Co-PD plan and provide training to senior leadership and trustees												
Administration and Project Evaluation												
Initiate grant, set up project management and time tracking systems, establish team roles and responsibilities, initiate contract (PD, Co-PD, Business Support Staff, Grants Manager)												
Evaluate capacity building and professional development progress (Contractor, PD, Co-PD)												